

What is claimed is:

1. An output filter for a delta sigma modulator, comprising an FIR filter that outputs output data of a delta sigma modulator from each of plural delay elements cascaded, controls currents from a current source on the basis of each of the output data to thereby attain currents weighted according to a filter characteristic, and adds the currents to output the result, wherein:

the current source is a constant current source.

2. An output filter for a delta sigma modulator as claimed in Claim 1, further comprising a current-to-voltage conversion unit that performs the current-to-voltage conversion by feedback resistors of a full differential operational amplifier, on the output side of the FIR filter.

3. An output filter for a delta sigma modulator as claimed in Claim 2, further comprising a single differential conversion operational amplifier on the output side of the full differential operational amplifier.

4. A digital signal processor comprising an output filter for a delta sigma modulator, as claimed in any of Claim 1 to Claim 3.